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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/890,742 | 09/24/2001 | Yukio Yamakawa | KANEBO CASE | 7745 |

7590 06/05/2003

Flynn Thiel Boutell & Tanis
2026 Rambling Road
Kalamazoo, MI 49008-1699

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| EXAMINER |
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BEFUMO, JENNA LEIGH

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| ART UNIT | PAPER NUMBER |
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1771

DATE MAILED: 06/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

HG

Office Action Summary

Application No.

09/890,742

Applicant(s)

YAMAKAWA ET AL.

Examiner

Jenna-Leigh Befumo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1 and 3, drawn to a nonwoven polyurethane fabric.

Group II, claim 2, drawn to a method of producing polyurethane fibers and nonwoven fabrics.

2. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: While both Group I and II are drawn to polyurethane fibers, Group I and Group II do not contain the same technical features since Group I does not include the method limitations recited in claim 2, i.e., the thermoplastic polyurethane has a specific Shore A hardness value, is dried to a specific moisture content, and then is made into filaments which are deposited and laminated together. While Group II does require polyurethane fibers which are bonded together the claims do not require a specific type of polyurethane or that the fibers are deposited and then laminated together. Therefore, Group I does not have the same technical features as Group II and therefore, the claims are not drawn to the same inventive concept.

3. During a telephone conversation with Terryence F. Chapman on April 7, 2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1 and

3. Affirmation of this election must be made by applicant in replying to this Office action.

Claim 2 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

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currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1 and 3 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a polyurethane nonwoven fabric having a tensile elongation not less than 100%, a recovery at 50% elongation not less than 75%, and a tear strength per basis weight not less than 5.5 gf, which is produced by using a polyurethane with a Shore A hardness of not less than 92 and a moisture content of 150ppm or less, melt-spinning the polymer into a filament and depositing and laminating the filaments in a sheets form at a temperature which is 35°C lower than the Vicat softening temperature, does not reasonably provide enablement for any polyurethane nonwoven fabric comprising filaments which are fused together as well as the cited properties. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

The Applicant teaches in the specification that the recited tensile elongation, recovery at 50% elongation, and tear strength produced in the nonwoven polyurethane fabric are due to the choice of polymeric material and processing limitations. Specifically, the Applicant teaches how to make a nonwoven with the claimed products by using polyurethane with a Shore A hardness

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of not less than 92 and then dehydrating the polyurethane so it has a moisture content of 150ppm or less. Further, the Applicant teaches that the polymer is melt-spun into a filament, followed by depositing and laminating the filaments into sheet form at a temperature which is 35°C lower than the Vicat softening temperature. There is no teaching or suggestion that the properties recited in claims 1 and 3 can be made by using polyurethane which has a Shore A hardness less than 92 and which is not dehydrated to a moisture content below 150ppm, or by using another method of melt-spinning which has different temperature characteristics than those taught by the Applicant. Therefore, claims 1 and 3 are rejected.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1 and 3 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claims 1 and 3 are indefinite because they claim properties of the nonwoven polyurethane fabric, but fail to set forth the specific composition or structure of the polyurethane nonwoven fabric which produces the properties. Claims that merely set forth physical characteristics desired in an article, and not setting forth specific compositions which would meet such characteristics are invalid as vague, indefinite, and functional since they cover any conceivable combination of ingredients either presently existing or which might be discovered in the future. Ex parte Slob (PO BdApp) 157 USPQ 172.

The Applicant has failed to set forth the specific structural limitations of the claimed polyurethane nonwoven fabric, except for the recitation that the fabric is made with polyurethane

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filaments and the filaments are fused together at points. Are these the structural features which produce the claimed tensile elongation, recovery at 50% elongation, and a tear strength per basis weight? Can the recited physical properties be produced in any polyurethane nonwoven fabric having fused and bonded filaments? What physical and method limitations produce the claimed properties? Until the Applicant limits the claims to those specific physical and method limitations which produce the claimed physical properties, the claim is vague and indefinite since the claim reads on products which can be produced in the future.

It is suggested that the Applicant use a product by process claim, and add the process limitations to the product claim, so that the claims are limited to the Applicant's invention and the claims particularly point out and distinctly claim the Applicant's invention.

Claim Rejections - 35 USC § 102/103

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 09188951 A (English Abstract).

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JP 09188951 A discloses a polyurethane nonwoven fabric made by piling up polyurethane elastic filaments and bonding every junction point of the filaments (abstract). Thus, the nonwoven is made from polyurethane filaments which are fused and bonded together. Further, the fabric has excellent flexibility, stretchability, and permeability.

Although JP 09188951 A does not explicitly teach the limitations tensile elongation, recovery at 50% elongations, and tear strength per basis weight, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. polyurethane filaments) and in the similar production steps (i.e. bonding and fusing the filaments together) used to produce the nonwoven elastic fabric. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed properties would obviously have been provided by the process disclosed by JP 09188951 A. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 06-293117 A is drawn to a nonwoven polyurethane fabric formed by fusing filaments together. However, based on the Applicant's specification, the product taught by JP 06-293117 A, which is Comparative Example 2, while it has the claimed recovery and tensile strength, does not have the claimed tear strength property.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (703) 605-1170. The examiner can normally be reached on Monday - Friday (9:00 - 5:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jenna-Leigh Befumo
June 2, 2003



CHERYL A. JUSKA
PRIMARY EXAMINER